AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for transmitting data in a mobile communication system, comprising the steps of:

segmenting a data stream into at least one consecutive frame having a variable data length, the data stream being segmented into a plurality of consecutive blocks having a variable data length, each said consecutive block being segmented into a plurality of sub-consecutive blocks having a byte length;

attaching, at each head of the consecutive frames, a header including a first set of bits indicating the sequence number of a consecutive block to which a first sub-consecutive block is included ~~corresponding to the head~~ and a second set of bits indicating the sequence number of a sub-consecutive block ~~corresponding to the head~~; and

transmitting the header-attached consecutive frames.

2. (Original) The method as claimed in claim 1, wherein the size of each consecutive block included in each consecutive frame is smaller than a predetermined size, and the header includes an indicator indicating whether the last sub-consecutive block of the consecutive block is included.

3. (Original) The method as claimed in claim 1, wherein the size of each consecutive block included in each consecutive frame is determined to a requested size.

4. (Original) The method as claimed in claim 1, wherein the size of each consecutive block included in each consecutive frame is identical to each other.

5. (Currently Amended) A device for transmitting data in a mobile communication system, comprising:

a data buffer for storing a data stream to be transmitted, the data stream being segmented into a plurality of consecutive blocks, each of said blocks being segmented again into a plurality of sub-consecutive blocks having a byte length;

a register for storing block sequence numbers for the consecutive blocks and data sequence numbers for the sub-consecutive blocks;

a controller for attaching a header ~~corresponding to a head~~ of a radio link protocol (RLP) frame, and transmitting the header-attached RLP frame which includes a block sequence number indicating the sequence number of the consecutive block <u>to which a first sub-consecutive block is included</u> ~~corresponding to the head~~ and a data sequence number indicating the sequence number of the sub-consecutive block ~~corresponding to the head~~.

6. (Original) The device as claimed in claim 5, wherein the size of each consecutive block included in the corresponding RLP frame is smaller than a predetermined size, and the header includes an indicator indicating whether the last sub-consecutive block of the consecutive block is included.

7. (Original) The device as claimed in claim 6, further comprising a forward resequencing buffer for storing the transmitted RLP frame in order to retransmit the transmitted RLP frame.

8. (Original) The device as claimed in claim 5, wherein the size of each consecutive block included in each consecutive frame is determined to a requested size.

9. (Original) The device as claimed in claim 5, wherein the size of each consecutive block included in each consecutive frame is identical to each other.